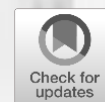*Original Research*

Perceived organizational support for innovation and its impact on employee work commitment among healthcare workers in Riyadh, Saudi Arabia

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Abstract

Background: The Support Theory for Organizations asserts that an organization can only experience growth when its employees feel accepted and have access to opportunities for change. The behavior of organizations towards change can either be accepting or resistant. When an organization adopts an innovative support strategy, it encourages positive employee behavior and creativity, in addition to practicing transformational leadership styles. Commitment, the state of being dedicated to work or action, is a fundamental theory for a thriving workplace environment.

Objective: This study aimed to determine the relationship between leader perception of innovation acceptance and employee work commitment among healthcare providers in multi-centers in Riyadh, Saudi Arabia.

Methods: This was a cross-sectional study conducted in 2019. Data were collected using Perceived Organization Innovativeness Scale and the Employee Engagement Questionnaire to measure leader innovativeness perception and employee work commitment. Convenience sampling was carried out in eight

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departments, and the data were analyzed using IBM SPSS version 23 for descriptive data analysis and ANOVA.

Results: The result was not significant enough to reach a proven level ($p < 0.05$). However, the leaders who participated in the study had a moderate to high perception of innovation, and 51% of the employees had an above-average commitment score.

Conclusion: The study concluded that leaders' behavior towards innovation may enhance employees' work productivity. However, a well-structured multicentric project should be conducted to assess this theory further.

Keywords

Innovation; employee commitment; leadership; Saudi Arabia

Background

According to the Organizations' Support Theory (Eisenberger et al., 1986), an organization can only experience growth if its employees feel accepted and have opportunities for change. The objectives of employees and their organizations are subject to modifications based on market demands and future goals. When organizations value their employees and consider their ideas and innovations for the future, employees feel appreciated and motivated to work. A successful organization places every employee as a planner toward achieving a better future (Eisenberger et al., 1986) within an environment that supports such practices.

Organizational behavior in response to change can be categorized as acceptance or resistance. In an environment that appreciates innovation and change, employees tend to be more flexible and productive. Therefore, adopting an innovative support strategy empowers positive employee behavior and creativity. Innovation involves generating new ideas to improve work processes, increase flexibility, enhance outcomes, or provide better work performance. Initiatives for innovation can come from any employee, leader, customer, or third party (Abbas & Asghar, 2010).

Commitment refers to the state of being dedicated to work or action. According to Meyer and Espinoza (2016), addressing employee interests leads to increased work commitment. The importance of organizational support in creating a successful work environment is undeniable. Eisenberger and Stinglhamber (2011) emphasize the criticality of an organization's support for innovation and change in the work environment. The Organization Support Theory, along with numerous other studies, demonstrates the positive impact of supporting innovation on the development and growth of businesses within an organization (Eisenberger et al., 1986).

Organizations aim to recruit high-potential and talented individuals to secure their future. These top performers are often attracted to organizations that support innovation, as it is a popular topic of interest. However, according to Sommer et al. (2017), it is unclear whether organizational support for innovation positively impacts employees' commitment. More research and investigation are needed to explore the relationship between organizational innovation acceptance and employee productivity. Innovative employees may freely move within the organization, making it crucial to have a clear definition and framework for innovation support (Sommer et al., 2017).

Organizational behavior towards supporting innovation has an impact on employees' proposal of new ideas and actions. According to Riivari and Lämsä (2019), an organization's ethical support, feasibility, and passion for growth positively affect employees, encouraging development. Their findings are crucial in today's marketplace. Therefore, it is recommended that organizations support and accept innovation, particularly from their employees, to promote growth and increase productivity. However, limited published papers measure where we stand in this behavior and how far leaders have adopted this approach (Riivari & Lämsä, 2019).

In their study, Lloréns Montes et al. (2004) examined the multifactorial behaviors that lead to positive support of innovation in organizations. Leadership skills and organizational behavior toward innovation were found to be fundamental to this process (Lloréns Montes et al., 2004). Providing opportunities for employees to be innovative can lead to increased creativity and contribute to a brighter future by overcoming obstacles and challenges (Lee & Trimi, 2018). Acar and Özşahin (2018) also reported a strong relationship between organizational support and work performance in business environments. The opportunity for continuous change motivates employees to stay ahead of the curve.

Despite the abundance of published studies on organizational support and work commitment, there is a dearth of research studying organizational support for innovativeness and its impact on employees' work commitment. This research project seeks to measure the orientation of innovation support among leaders and their organizations and link it to employees' commitment to work and their propensity to propose new ideas.

In 2013, the Ministry of Health in Saudi Arabia launched a Healthcare Innovation Contest to support the behavior of innovation among healthcare employees, including healthcare providers and administrators. The Ministry of Health provides support to innovative and ambitious projects that propose innovative solutions to any obstacles. This contest urges individuals to present

creative, innovative, and applicable ideas that lead to improving and developing healthcare in Saudi Arabia (Saudi Arabia Ministry of Health, 2019). In 2016, the Ministry of Health established an "Innovation Center" in the main branch of Riyadh. One of its products is the use of visual simulation for children who present to the clinic for vaccination. The primary result showed excellent compliance by children and significantly lower stress when receiving the vaccination (Clark & Baum, 2019). This project has been adopted by international companies and accepted by many other international and national healthcare centers.

This study aimed to determine the relationship between leader perception toward acceptance of innovation and employees' work commitment among healthcare providers in multiple centers in Riyadh, Saudi Arabia.

Methods

Study Design
A cross-sectional study design was used in this research.

Sample/Participants
Ten department leaders and their employees participated in the current research and completed the questionnaire to measure their commitment and innovation acceptance behavior. The participants were selected using convenience sampling.

Instruments
Two instruments were used in this study:

1) A Perceived Organization Innovativeness Scale (POIS) was used to measure leaders' perception toward acceptance of innovations (Anderson, 2016). This scale was selected due to validity, qualitative measure, and free access. POIS contains 25 questions. Each question has a Likert scale of 5 points: Strongly disagree, Disagree, Undecided, Agree, Strongly Agree. A numerical number is given based on points that start from 1 to 5, as Strongly disagree takes 1 while Strongly agree takes 5 (Anderson, 2016). Then, the survey scores range from 25 to 125 by calculating the equation (PORGI = 66 + total from Step 2 - total from Step 1). Step 1: Add the scores for the following items from the survey: 1, 3, 6, 8, 12, 14, 15, 17, 18, 22, and 23. Step 2: Add the scores for the following items from the survey: 2, 4, 5, 7, 9, 10, 11, 13, 16, 19, 20, 21, 24, and 25.

2) Employee Engagement Questionnaire (EEQ) used to measure employee engagement in their work environment (Sarah Marrs, 2019). This questionnaire

was selected due to validity, open access, ease of being filled, and the English language. The scale measures the employees' perception of engagement in the work environment. EEQ contains 15 questions. Each question has a Likert scale of 5 points: Strongly disagree, Disagree, Undecided, Agree, Strongly Agree. A numerical number is given based on scores that start from 1 to 5, as Strongly disagree takes one while Strongly agree takes 5. After subtracting the point of the negative question, the sum of the points gives the final result of the scale. A higher score means better work commitment.

Data Collection

Data were collected in 2019. A total of ten departments from different organizational sections were randomly selected and invited to participate in the study. All participants received an informed consent form and instructions to complete the POIS scale electronically. Each department had at least ten employees involved in the project once their leader was included.

Data Analysis

The data collected from leaders and employees were independently analyzed to determine the effect of their responses. The results were then linked to identifying any relationship between leader acceptance and employee work commitment. The data were analyzed using the SPSS Mac version, and ANOVA tests were conducted to determine the significant difference between the two scores. To validate the questionnaire, Cronbach's alpha test was carried out. A p-value of 0.05 or less was considered significant. All data were sorted and analyzed using Excel Sheets 2017 Mac version.

Ethical Considerations

This study obtained Institutional Review Boards approval from King Abdulaziz Medical City, Riyadh, Saudi Arabia. The study participants signed electronic informed consent for voluntary participation. The privacy and confidentiality of the respondents were secured. The questionnaires also covered the problem by not seeking to find the respondents' names.

Results

Our study included ten departments that were selected using a convenient method. However, two departments had to be withdrawn due to a poor response rate, leaving a total of eight departments for analysis. We obtained participation consent from 10-16 employees in each department after thoroughly explaining the aim of the research. The EEQ survey, which measures work commitment on

a scale from 19 to 71, was used (Sarah Marrs, 2019). Our results showed that the average mean score was 43.68. The highest mean score was 54.30 ± 7.4 SD, while the lowest was 34.67 ± 12.2 SD (Table 1). The majority of participants scored above the average on the scale, with 51% showing positive work commitments (Figure 1). We did not remove any outliers, as all participants answered with attention to the survey.

Table 1 Employee engagement

Department	Participants	Minimum Score	Maximum Score	Mean	Median	Std. Deviation
Internal Medicine	11	21	53	40.36	41.00	9.6
VIR	10	29	65	47.30	45.50	10.7
OB/GYN OPD	10	34	65	48.50	45.50	11.0
Pediatrics	10	42	67	54.30	54.50	7.4
Respiratory Services	16	17	61	36.13	34.00	14.4
Cardiac Education	12	18	53	34.67	35.50	12.2
Nursing inpatient	12	22	55	39.92	41.50	9.9
Clinical Nutrition	11	21	64	48.27	53.00	15.5

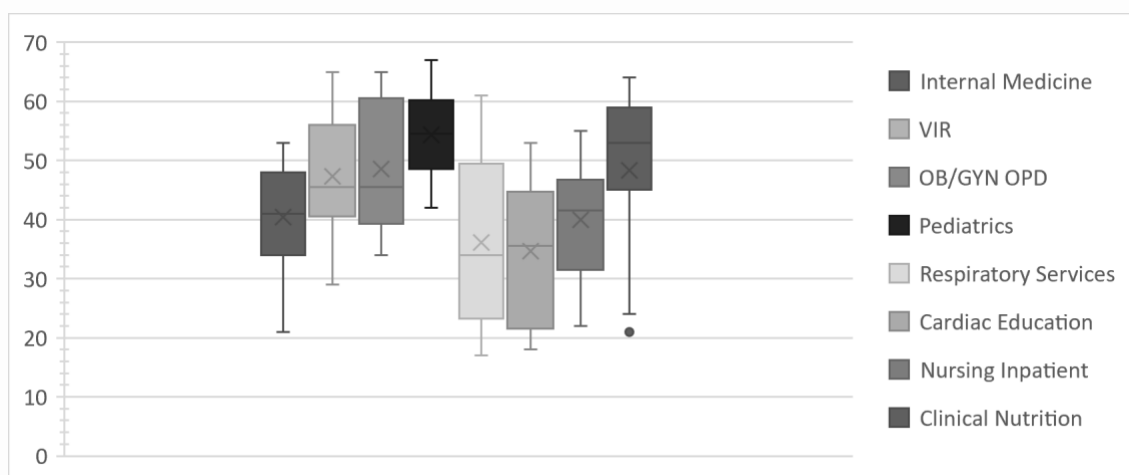VIR: Vascular Intervention Radiology | OB/GYN OPD: Obstetrics & Gynecology Out Patient Department

Figure 1 Employee commitment score

An electronic survey was administered to eight leaders to assess their perception of innovation, with scores ranging from 25 to 125. A score of 110 or higher indicates that the organization or leader is "innovative," while a score of 91 to 110 suggests they are "early adopters of innovativeness." Scores from 71 to 90 indicate that they are in the "early majority," while scores from 50 to 70 indicate that they are in the "late majority." A score below 50 indicates that the organization or leader is a "laggard" or "traditional." Generally, organizations or leaders with a score of 90 or higher are considered highly innovative, while those with a score of 50 or lower are considered low in innovativeness. Scores ranging from 50 to 90 are considered moderate in innovativeness (Anderson, 2016).

In our study, the scores range from 64 to 96, as shown in Table 2. One of the departments sampled can be classified as innovative, while another falls into the early adopter of innovativeness category. The majority of departments (5 in total) fall under the "Early Majority" category, and one department is classified as "Late Majority." Overall, the organization has either moderate or highly innovative departments.

Table 2 Perceived organizational innovativeness scale scores

Department	Score	Class	Innovativeness
Internal Medicine	90	Early Adopt	High
VIR	76	Early Majority	Moderate
OB/GYN OPD	87	Early Majority	Moderate
Pediatrics	81	Early Majority	Moderate
Respiratory Services	64	Late Majority	Moderate
Cardiac Education	96	Innovative	High
Nursing inpatient	88	Early Majority	Moderate
Clinical Nutrition	85	Early Majority	Moderate

The analysis of the impact of leader behavior on enhancing employee work commitment did not yield significant results. Furthermore, no significant correlation was found between the level of innovativeness in leaders and their employees' work commitment. Both the Perceived Organizational Innovativeness Scale (POIS) and Employee Engagement Questionnaire demonstrated high levels of internal consistency, with Cronbach's alphas of 0.997 and 0.999, respectively (see Table 3).

Table 3 Comparison between innovation acceptance and work engagement

POIS	EEQ	Pearson correlation	Innovativeness class	EEQ	ANOVA test
90	40.36	0.756	Early Adopt	40.36	0.497
76	47.30	0.548	Early Majority	47.30	0.237
87	48.50	0.258	Early Majority	48.50	0.867
81	54.30	0.914	Early Majority	54.30	0.253
64	36.13	0.263	Late Majority	36.13	0.433
96	34.67	0.953	Innovative	34.67	0.204
88	39.92	0.171	Early Majority	39.92	0.878
85	48.27	0.278	Early Majority	48.27	0.871

POIS: Perceived Organization Innovativeness Scale | EEQ: Employee Engagement Questionnaire

Discussion

Our cross-sectional study examined the relationship between employee commitment and leader behavior toward innovativeness. Although these two factors are believed to influence each other positively, our research found no significant relationship between leader innovativeness perception and employee work commitment ($p > 0.05$). This may be due to several factors, including the

characteristics of the leaders and employees. Our study did not consider factors such as employee level (junior vs. senior), job type, work hours, and job style that could affect employee engagement. For instance, Lambert et al. (2018) found that job stress and burnout can significantly impact employees' affective and continuous commitment. While 51% of our participants scored above the average regarding work commitment, we cannot exclude the possibility of burnout as it was not measured. It is important to note that the positive emotions observed during the research may have influenced employee responses. Nonetheless, the reliability of the surveys was deemed high, with Cronbach's alpha values above 0.70.

Audenaert et al. (2019) investigated the impact of employee performance management on innovativeness and creativity. Their study revealed a positive and significant relationship between these factors. In contrast, our research aimed to explore the relationship between leaders and employees and how positive behavior influences innovation and work commitment. While the theoretical implications suggest a positive outcome, we could not establish statistical significance. Another study by Anagha and Magesh (2016) examined the impact of a creative climate on employee commitment and innovation. Their findings revealed that a creative work environment enhanced work commitment and employee creativity. Our study also supports this finding, as we found that leaders' perception of innovation has a positive effect on employees, which is consistent with previous research.

Thomas Hurt and Ward Teigen (1977) evaluated the innovativeness scale POIS and found it to strongly predict individual innovation and job satisfaction. In our study, we observed that most departments in the organization had a moderate to high perception of innovation. Our results are consistent with Thomas Hurt and Ward Teigen's findings, and we also found the scale highly reliable. Eisele (2017) measured innovation and its relationship with social creativity among leaders and employees. Although he found a relatively low degree of change, the organization was still labeled innovative based on the scale. Our sample size was comparable to Eisele's, and we found a better outcome, with 51% of employees showing better work commitment with moderate to high innovativeness.

Implications for Research and Practice

The relationship between leaders and employees can have a significant impact on an organization's structure and outcomes. The leadership style can effectively improve the quality of work performance and the overall outcome. Employees' perception of innovation directly affects their work and increases their

satisfaction. Measuring employees' acceptance and initiative toward innovation can serve as an excellent indicator for further research studies.

Conclusion

The perception of leaders toward innovation has a significant impact on employee engagement and, ultimately, the performance of the organization. In our study, 51% of employees showed a high level of work commitment, which was positively influenced by leaders who supported innovation to a moderate to a high extent. Although we were unable to establish a statistically significant relationship between leaders' perception of innovation and employee commitment, our findings suggest the need for further research in this area.

Authors' Contributions
All authors met the ICMJE authorship criteria. In addition, all authors were accountable for each step of the study and approved the final version of the article to be published.

Authors' Biographies
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Data Availability Statement
Data were available upon request to the corresponding author.

Declaration of the Use of AI in Scientific Writing
Nothing to declare.

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